

REMARKS

The Official Action mailed January 22, 2003, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to June 23, 2003. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on March 1, 2002, June 4, 2002, and October 3, 2002. The Applicants await consideration of the Information Disclosure Statement filed on April 11, 2003.

Claims 1-34 are now pending in the present application, of which claims 1, 11, 19 and 27 are independent. Claim 26 has been amended to correct a minor typographical error in the dependency. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

Paragraph 2 of the Official Action rejects claims 1-8, 11-16 and 27-32 as anticipated by the Applicants' prior art admissions. The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present invention. The Applicants' prior art admissions do not teach all the elements of the independent claims, either explicitly or inherently. The Official Action asserts that the claims of the present invention "do not require that such impurities actually be present at all" (page 2, Paper No. 7). The Applicants respectfully disagree. Independent claims 1 and 11 recite that the insulating film includes halogen at a concentration of $5 \times 10^{20} \text{ cm}^{-3}$ or less and carbon at a concentration of $5 \times 10^{19} \text{ cm}^{-3}$ or less. Independent claims 19 and 27 recite a similar feature. The Applicants respectfully submit that the independent claims require that halogen and carbon impurities are actually present in the film. In other words, the concentration of halogen and carbon in the film is not zero. The Applicants' prior art admissions are silent on the presence of halogen or carbon in the film. In fact, the Official Action concedes that the Applicants' prior art admissions do not teach that "halogens or carbon would be present" (*Id.*). Therefore, the Applicants' prior art admissions do not teach all the elements of the independent claims, either explicitly or inherently.

Since the Applicants' prior art admissions do not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be

maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(a) are in order and respectfully requested.

Paragraph 3 of the Official Action rejects claims 1-18 and 27-34 as anticipated by JP 01-238024. The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present invention. JP '024 does not teach all the elements of the independent claims, either explicitly or inherently. As noted above, the Applicants respectfully submit that the independent claims require that halogen and carbon impurities are actually present in the film. The Official Action concedes that that the method of JP '024 does not employ halogen, that no halogen is present in the device of JP '024 and that no alkyl group (C impurities) are left after formation of the device of JP '024 (page 3, Paper No. 7). Therefore, JP '024 does not teach all the elements of the independent claims, either explicitly or inherently.

Since JP '024 does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) are in order and respectfully requested.

Paragraph 5 of the Official Action rejects claims 19-24 as obvious based on either the Applicants' prior art admissions or JP '024. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2143-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole


would have suggested to those of ordinary skill in the art.” In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. As noted above, the Applicants’ prior art admissions and JP ‘024 do not teach that halogen and carbon impurities are present in the film of the prior art devices. Furthermore, nothing in the prior art suggests that halogen and carbon impurities are present in the film of the prior art devices at the concentrations recited by the claims of the present invention. Since the Applicants’ prior art admissions and JP ‘024 do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraph 7 of the Official Action rejects claims 1-34 under the doctrine of obviousness-type double patenting over claims 1-28 of U.S. Patent No. 5,866,932 to Yamazaki et al. In view of the above prior art rejections, Applicants respectfully request that the double patenting rejection be held in abeyance until an indication of allowable subject matter is made in the present application. At such time, the Applicants will respond to any remaining double patenting rejections.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants’ undersigned attorney at the telephone number listed below.

Respectfully submitted,


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MARKED-UP VERSION OF THE AMENDED CLAIMS

26. (Amended) A device according to claim [17] 25,
wherein the organic silane comprises at least a material selected from the group
consisting of $\text{Si}(\text{OC}_2\text{H}_5)_4$, $\text{Si}_2\text{O}(\text{OC}_2\text{H}_5)_6$, $\text{Si}_3\text{O}_2(\text{OC}_2\text{H}_5)_8$, $\text{Si}_4\text{O}_3(\text{OC}_2\text{H}_5)_{10}$, and
 $\text{Si}_5\text{O}_4(\text{OC}_2\text{H}_5)_{12}$.